L 28487-66 EPF(n)-2/EWT(l)/EWT(m)/ETC(f)/EWG(m) IJP(c) AT

ACC NR: AP6013136 SOURCE CODE: UR/0057/66/036/004/0759/0762

58
B

AUTHOR: Kvartskhava, I.F.; Meladze,R.D.; Khautiyev,E.Yu.; Reshchetnyak, N.G.

ORG: none

TITLE: On reasons for the limitation of the velocity of plasmoids in rail accelerators

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 4, 1966, 759-762

TOPIC TAGS: plasma accelerator, plasma acceleration, rail accelerator, plasmoid, plasma gun

ABSTRACT: It is suggested that the reason why the velocities of plasmoids in rail accelerators are more than an order of magnitude lower than the possible stationary drift velocities in the crossed fields is that not one plasmoid, but a chain of successive plasmoids, is formed in the accelerator. Experimental data are reviewed which indicate that a number of plasmoids are in fact produced; the failure to observe multiple plasmoid production in some experiments is ascribed to the complexity of the phenomena that can arise. The mechanism of multiple plasmoid production is discussed. The repeated breakdowns giving rise to the successive plasmoids reduce the applied potential, limit the velocity of the plasmoids, and regulate the quantity of accelerated plasma. It is argued that currents will circulate between the successive plasmoids of the chain, as a result of which most of the discharge current will be carried by the first and last plasmoids of the chain and the intervening ones will not

UDC: 523.9

Card 1/2

L 28487-66

ACC NR: AP6013136 0

interact strongly with the magnetic field. If there is gas ahead of the first plasmoid a hydrodynamic shock front will be formed; otherwise the first plasmoid can reach a velocity considerably exceeding the drift velocity of the intermediate ones. The presented picture of the phenomena in a rail accelerator is somewhat oversimplified; it will be elaborated and complicating phenomena will be discussed in future articles. Orig. art. has: 2 figures.

SUB CODE: 20 SUBM DATE: 22Oct65 ORIG. REF: 004 OTH REF: 006

Card 2/2

MELAKHOLIN, N. V.

Interferometer

Application of new model of polarization interferometer for measuring index of refraction of immersion media, Trudy Inst. Kristl. no. 5, 1949.

Monthly List of Russian Accessions, Library of Congress December 1952. Unclassified.

MELAKHOLIN, N.M.

Optical orientation of crystalline plates in oblique cross sections. Kristallografiia 8 no.3:480-481 My-Je '63. (MIRA 16:11)

1. Institut kristallografii AN SSSR.

VORONTSOV, L.; VLADIMIROV, L.; KRASNOV, V.A., spets. red.;
MELAKHOV, P.N., red.

[Science, 1961; throught the Exhibition pavilions] Nauka
god 1961; po pavil'onam Vystavki. Moskva, 1961. 65 p.
(MIRA 17:8)

1. Moscow. Vystavka dostizheniy narodnogo khozyaystva S.S.S.R.

NECHIPORUK, N.N. (Vinnitsa); FIBR, A.K. (Vinnitsa); MELAKISHIN, V.A. (Vinnitsa); YURCHAK, Yu.I. (Vinnitsa)

Home-made thermistor. Fiz. v shkole 21 no.1:66-67 Ja-F '61. (MIRA 14:9)

(Thermistors)

MELAMED, A.

MELAMED, A. Use of the Assembly method for repairing automobiles.p.21.

Vol. 7, no. 10, 1955, TRANSPORTNO DELO, SOFIYA, BULGARIA.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10, Oct. 1956.

LEVITIN, K.; MELAMED, A.

This is how quantum physics was born. Nauka i zhizn' 28 no.8:74-79 Ag '61. (MIRA 14:8)

(Bohr, Niels Hendrik David, 1885-)

LEVITIN, K.; MELAMED, A.

Vermiculite, the miracle of Kovdor. Nauka i zhizn' 29 no.10:84-86 O '62. (MIRA 15:12)

1. Spetsial'nyye korrespondenty zhurnala "Nauka i zhizn'".
(Vermiculite)

LEVITIN, K. [illegible], red. KRASNOVSKIY, A.A., red.

[Hot light] Goriachii svet. Moskva, Znanie, 1965. 44 p.
(Novoe v zhizni, nauke, tekhnike. IV Serija: Tekhnika, no.20) (MIRA 18:10)

MELAMED, A.A. (Zhmerinka, Vinnitskoy oblasti, ul. [illegible])

Agricultural injuries of collective farmers [illegible] private plots. Ortop., travm. i protez. 25 no.3:64-67 Mr '64. (MIRA 18:3)

1. Rayonnyy travmatolog Zhmerinskogo rayona, Vinnitskoy oblasti (glavnyy vrach rayona - A.Yakovlev).

LEVITIN, Karl Yefimovich; MELAMED, Anatoliy Davidovich; CHERNIKOVA, V.K., red.

["NRV" patent; conversations with Azerbaijan scientists] Patent NRV; besedy s azerbaidzhanskimi uchenymi. Moskva, Izd-vo "Znanie," 1964. 48 p. (Novoe v zhizni, nauke, tekhnike. XI Seriia: Khimiia, no.5) (MIRA 17:7)

BONDAR, V.V.; MELAMED, A.V.; STAROBINSKA, R.Kh.

Anticorrosion measures in the shops of coke-oven gas purification by monoethylamines. Khim. prom. [Ukr.] no.4:73-75 O-D'63. (MIRA 17:6)

TSUKERMAN, S.I.; MELAMED, B.D.

Gas-fired titlting furnaces. Lit.proizv. no.2:40-41 F '62.
(MIRA 15:2)

(Foundries--Equipment and supplies)

MELAMED, Z. M.

26

PHASE I BOOK EXPLOITATION SOV/5473

Gornoye delo; entsiklopedicheskiy spravochnik. t. 8: Statsionarnoye elektromekhanicheskoye oborudovaniye. Elektrosnabzheniye shakht (Mining Industry; an Encyclopedic Handbook. v. 8: Stationary Electromechanical Equipment. Electric Power Supply to Mines) Moscow, Gosgortekhizdat, 1960. 784 p. Errata slip inserted. 18,500 copies printed.

Chief Ed.: A. M. Terpigorev (Deceased); Members of the Editorial Board: A. I. Baranov, F. A. Barabanov (Deceased), A. A. Boyko, V. K. Buchnev, A. N. Zaytsev; Deputy Chief Eds.: I. K. Kit and N. V. Mel'nikov; I. N. Plaksin, N. M. Pokrovskiy, A. A. Skochinskiy (Deceased), A. O. Spivakovskiy, I. K. Stanchenko, A. P. Sudoplatov, A. V. Topchiyev, S. V. Troyanskiy, A. K. Kharchenko, L. D. Shevyakov and M. A. Shchedrin; Editorial Board for this volume: Resp. Ed.: F. A. Barabanov; Deputy Resp. Ed.: Z. M. Melamed; N. A. Arzamasov, G. M. Yelanchik, V. K. Yefremov, B. L. Zasadych, I. M. Zhumakhov, N. A. Letov, P. P. Nesterov, I. A. Rabinovich, K. I. Skorkin, and V. A. Sumchenko; Authors: G. A.

Card 1/16

Babak, Candidate of Technical Sciences, V. D. Belyy, Professor, Doctor of Technical Sciences, K. S. Borisenko, Candidate of Technical Sciences, A. G. Borumenskiy, Candidate of Technical Sciences, I. V. Brusilovskiy, Candidate of Technical Sciences, A. R. Bushel', Candidate of Technical Sciences, V. P. Bukhgol'ts, Engineer, M. N. Vasilevskiy, Candidate of Technical Sciences, A. N. Vas'kovskiy, Engineer, B. N. Vlasenko, Engineer, I. Ya. Gershikov, Engineer, V. G. Geyer, Professor, Doctor of Technical Sciences, A. D. Dimashko, Engineer, V. S. Dulin, Candidate of Technical Sciences, I. L. Lokshin, Engineer, B. M. Melamed, Engineer, Yu. A. Mikheyev, Engineer, V. P. Morozov, Engineer, M. I. Mushkatin, Engineer, V. S. Pak, Academician, I. M. Perskaya, Engineer, N. M. Rusanov, Candidate of Technical Sciences, G. P. Savel'yev, Candidate of Technical Sciences, Ya. M. Smorodinskiy, Candidate of Technical Sciences, K. A. Ushakov, Honored Scientist and Technologist, Professor, Doctor of Technical Sciences, B. M. Furmanov, Engineer, and N. N. Chernavkin, Engineer. Eds.: Ya. M. Drozdov, Engineer, B. I. Zasadych,

Candidate of Technical Sciences, N. S. Karpyshev, Candidate of Technical Sciences, N. A. Letov, Candidate of Technical Sciences, Z. M. Melamed, Candidate of Technical Sciences, Yu. A. Mikheyev, Engineer, V. P. Morozov, Engineer, V. I. Polikovskiy, Professor, Doctor of Technical Sciences, I. A. Rabinovich, Engineer, M. S. Rabinovich, Candidate of Technical Sciences, I. A. Raskin, Engineer, V. S. Tulin, Engineer, S. Ye. Unigovskiy, Engineer, K. A. Ushakov, Honored Scientist and Technologist, Professor, Doctor of Technical Sciences, M. M. Shemakhanov, Candidate of Technical Sciences, P. F. Shishkov, Candidate of Technical Sciences, and V. B. Yablonovskiy, Engineer; Eds. of Publishing House: N. A. Arzamasov and T. I. Rybal'nik; Tech. Ed.: V. L. Prozorovskaya and M. A. Kondrat'yeva.

PURPOSE: This handbook is intended for mining and mechanical engineers as well as for other skilled personnel of the mining industry concerned with the handling and operation of various installations and equipment used in mines.

SOV/5473

Mining Industry (Cont.)

COVERAGE: Volume VIII of the mining handbook contains detailed information on mine hoisting installations, machines and equipment, mine ventilation units, duct systems, dewatering facilities, various types of pumps, pump meters, pumping stations, and the automatic remote control of these units. The handbook also describes and explains the operation of the air compression units and compressors. Heat-generating and heat-supply equipment of mines is described, as are the electric power supply systems and other electrical equipment such as transformers, power distribution systems, and grounding devices. Telephone communication and signaling systems used in mines are also treated. No personalities are mentioned. Each part of the handbook is accompanied by references, mostly Soviet.

TABLE OF CONTENTS [Abridged]:

PART I. MINE HOISTING UNITS

Card 4/16

BUKHMAN, G.D., inzh.; MARINOV, A.M., inzh.; MELAMED, B.M., inzh.; YAROSLAVTSEV, A.M., inzh.

Start of a 200 Mw. block in the electric power system of Sverdlovsk. Elek.sta. 34 no.2:2-7 F '63. (MIRA 16:4)
(Sverdlovsk--Electric power plants)

BLOKH, G.A., dotsent, kand.tekhn.nauk; MELAMED, Ch.L., inzh.

Reaction of carbon black with sulfur, Captax, and thiuram in the rubber vulcanization process. Izv.vys.ucheb.zav.; tekh.leg. prom. no.2:28-38 '59. (MIRA 12:10)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. Dzerzhinskogo.
(Carbon black) (Vulcanization)

S/138/60/000/008/010/015/XX
A051/A029

AUTHORS: Blokh, G.A.; Melamed, Ch. L.; Sakhnenko, I.A.

TITLE: A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

PERIODICAL: Kauchuk i Rezina, 1960, No. 8, pp. 30 - 32

TEXT: The present method used in the Soviet Union for automobile casing repair was found to be impractical, requiring excessive work and equipment. In this method a non-vulcanized tread is applied to the casing being repaired and the latter vulcanized in ring-shaped individual vulcanizers at a temperature of 140 - 150°C for 1.5 - 2 hours. In 1957 the Rubber Department of the Dnepropetrovskiy khimiki-tekhnologicheskiy institut (Dnepropetrovsk Institute of Chemical Technology) in cooperation with the Dnepropetrovskiy shinoremontnyy zavod (Dnepropetrovsk Tire Repair Plant) began investigating the possibility of using pre-vulcanized treads in casing repair. A study was made of: 1) the application of adhesives having special compositions and used to fasten the pre-vulcanized tread to the casing, 2) the use of laminated non-vulcanized mixtures capable of co-vulcanizing with the pre-vulcanized tread and tire casing at room or low temperatures

Card 1/9

S/138/60/000/008/010/015/XX
A051/A029

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

(80°C). A number of adhesives with various compositions were found to have adhesion indices of 0.5 to 0.6 kg/2.5 cm both at room and elevated temperature (100°C) which do not satisfy the ГОСТ (GOST) standard of 3.5 kg/1 cm. Adhesives containing oxidation-reduction systems were also found to have insufficient adhesion indices. Adhesives based on natural rubbery СКБ (SKB) and СКС-30 (SKS-30) and containing various oxidation-reduction systems were investigated under rubber-doubling conditions: duration 3 - 5 hours, temperature 50 - 70°C. The obtained data are listed in Table 2. A third method using a rapidly-vulcanizing laminated mixture (Table 3) was investigated. Best results were obtained at 80 - 90°C using a natural rubber layer, containing cymate and also a combination of cymate and ДФГ (DFG). The strength of adhesion was 17.5 kg/2.5 cm, the thickness of the layer was 0.7 - 1 mm. Based on these results, experimental 6.00 - 16 tire casings were produced, repaired at a temperature of 80 - 90°C applying a pre-vulcanized tread based on laminated rubber. Service tests performed by the Taxi depot revealed the tires to have a run capacity of 5,000 - 15,000 km. Their destruction eventually took place not as a result of side or casing rupture, but rather from exfoliation of the casing surface. Other tire casings, repaired with pre-vulcanized treads and

Card 2/9

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

fastened to the casing with steel bands followed by subsequent heating in a vat at 80°C had a run capacity of 6,000 km. Studies of rubber mixtures and adhesives containing amino-salts of alkyldithiocarbamine acids and sulfur, zinc oxide and zinc stearate (Table 4) showed that dibutyldithiocarbamate dibutylamine and dibutyldithiocarbamate triethylamine used as accelerators in adhesives and layers based on natural rubber ensure a high strength of adhesion, when the rubber is vulcanized at low temperatures (about 20°C) and the vulcanization process at this temperature is completed in 3 - 4 days. It is recommended that the pre-vulcanized tread be made in the form of a bracelet rather than a band to ensure a strong bond at the jointed end of the tread that the adhesive be applied on the interal surface of the tread bracelet and the external surface of the casing, and between these a quickly-vulcanizing mixture be added. Pressure in the running compartment would secure the contact between the tread and the casing. Two types of rubber mixture and the corresponding adhesive should be manufactured with sulfur and no accelerator or without sulfur and an accelerator to avoid scorching during storage. The authors stress the fact that low-temperature vulcanization could be of value to the rubber article and cable-manufacturing industries, especially where multi-layer rubber products, including thermoplasts (polyethylene, etc.) are produced. There

S/138/60/000/008/010/015/XX
A051/A029

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

are 4 tables, and 3 Soviet references.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut, im. F.E. Dzerzhinskogo i Dnepropetrovskiy shinoremontnyy zavod (Dnepropetrovsk Institute of Chemical Technology, imeni F.E. Dzerzhinskiy and Dnepropetrovsk Tire-Repair Plant)

Card 4/ 9

S/138/60/000/008/010/015/XX
A051/A029

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

Table 2:

Strength of Adhesion of Rubber to Rubber Using Adhesives, Containing Oxidation-Reduction Systems

Characteristics of the System	Strength of Adhesion, kg/2.5cm width of the sample		
	Natural Rubber	SKB	SKB-30
benzoyl peroxide-benzoin-iron naphthenate	4.0 - 5.0	1.3 - 2.0	3.5 -4.0
iron naphthenate-benzoin	2.8 - 3.5	0.9 - 1.1	2.3 - 3.5
benzoyl peroxide-benzoin	4.4 - 5.0	0.7 - 1.4	3.0 - 3.2
isopropyl hydrogen peroxide-benzene-diphenyl guanidine--dibenzothiazoldisulfide	4.7 - 5.0	1.0 - 1.6	4.0 - 5.0
isopropyl hydrogen peroxide--benzene-mercaptobenzothiazol	3.2 - 4.0	1.3 - 2.0	2.3 - 4.0
benzoyl peroxide-iron naphthenate-polyethylene amines	3.7 - 6.0	1.7 - 2.2	3.2 - 4.2

Card 5/9

S/138/60/000/008/010/015/XX
A051/A029

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

Table 3:

Strength of Adhesion of the Tread Rubber to the Casing Using a Laminated Quickly--Vulcanizing Mixture

Composition of the Laminated Mixture	Doubling Conditions		Strength of Adhesion kg/2.5 cm width of sample
	duration min,	temperature, °C	
NR+zinc butylxanthogenate and paratoluidine	60	80 - 90	1.6
NR+zinc dimethyldithiocarbamate (zimate)	60	80 - 90	more than 17.5
NR+zinc dimethyldithiocarbamate (zimate) diphenyl guanidine (1:1)	20	80 - 90	more than 17.5
chloroprene rubber+zinc dimethyldithiocarbamate	60	80 - 90	6.0
NR+benzoyl peroxide + iron naphthenate + benzoin	180	50 - 70	3.5

Card 6/ 9

S/138/60/000/008/010/015/XX
A051/A029

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

Table 3:

Strength of Adhesion of the Tread Rubber to the Casing Using a Laminated Quickly--Vulcanizing Mixture

Composition of the Laminated Mixture	Doubling Conditions		Strength of Adhesion kg/ /2.5 cm width of sample
	duration min,	temperature °C	
NR+isopropyl benzene hydrogen peroxide + DFG+altax	180	50 - 70	4.5
The same, based on SKS-30	180	50 - 70	5.0
NR + benzoyl peroxide + iron naphthenate + polyethylene amines	180	50 - 70	6.0
The same, based on SKS-30	180	50 - 70	5.2

Card 7/9

S/138/60/000/008/010/015/XX
A051/A029

A New Method of Applying the Vulcanized Tread in Automobile Tire Casing Repair

Table 4:

Effect of Amino-Salts of Dialkyldithiocarbamine Acids on the Strength of Adhesion Between the Tread and Casing Rubbers

Accelerator	Vulcanization Duration at 18°C, hours	Strength of Adhesion, kg/2.5 cm width of sample
Dibutyldithiocarbamate dibutylamine $(C_4H_9)_2NC(S)SH.HN(C_4H_9)_2$	24	6.0
	72	11.0
	144	18.0
Dibutyldithiocarbamate triethylamine $(C_4H_9)_2NC(S)SH.N(C_2H_5)_3$	24	6.0
	96	10.5
	144	17.0

Card 8/9

A New Method od Applying the Vulcanized Tread in Automobile Tire Casing Repair

Table 4:

Effect of Amino-Salts of Dialkyldithiocarbamate Acids on the Strength of Adhesion Between the Tread and Casing Rubbers

Accelerator	Vulcanization Duration at 18°C, hours	Strength of Adhesion, kg/2.5cm width of sample
Dibutyldithiocarbamate tributylamine $(C_4H_9)_2NC(S)SH.N(C_4H_9)_3$	24 96 144	3.5 4.5 5.0
Diethyldithiocarbamate diethylamine $(C_2H_5)_2NC(S)SH.HN(C_2H_5)_2$	72 240	4.5 5.0

Card 9/9

S/153/61/004/005/005/005
E134/E485

AUTHORS: Blokh, G.A., Melamed, Ch.L., Ol'shanskiy, L.P. and Levitin, Zh.N.

TITLE: Heat- and moisture-resistant resins for electrical insulation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya. v.4, no.5, 1961, 847-853

TEXT: The paper deals with the problem of insulating materials which have the required electrical and mechanical properties as well as high heat- and moisture-resistance. The present investigation is specifically concerned with insulating resins subjected to simultaneous heating and cooling on opposite sides (140°C and 20°C). The ageing tests were carried out on rubber tubing, the outside of which was maintained at 140°C whilst water was passed through the inside, the tubing was subsequently cut into sample pieces for physical tests. The usual ageing method of heating samples in a humidity cabinet by means of warm air proved unsuitable, because under normal conditions the heat transfer between air and rubber is less than that between water and rubber. Electric resistance heating of the tube surface, thermostatically

Card 1/1

Heat- and moisture-resistant ...

controlled by a thermocouple, was therefore employed for each individual sample. A sketch of the apparatus with some constructional details is given (see figure). The resins based on the following rubbers were investigated: styrene-butadiene [illegible] 30 (SKS-30), silicone СКС-30АБС (SKS-30ABS), СКС-30АМБС (SKS-30AMBS) obtained by the method developed by A.P.Pisarenko and his associates (Ref.1: Kauchuk i rezina, no.2, 6, (1957)), carboxylated styrene-butadiene SKS-30 obtained by the method developed by B.A.Dolgoplosk and his associates (Ref.2: Kauchuk i rezina, no.6, 1 (1957)) butadiene-methyl vinyl pyridine and butyl rubbers. They were also investigated in combination with each other and with natural rubber, and with chalk talc, pyrophyllite and powdered silica gel as fillers. The composition of the tested resins is given in detail. The results of the tests are given in Table 2. The best insulating properties were obtained from styrene-butadiene resins. Compounds based on methyl vinyl pyridine and butyi rubber showed insufficient heat- and moisture-resistance as well as unsatisfactory electrical properties. There are 1 figure, 3 tables and 3 references 2 Soviet-bloc and 1 Russian translation from non-Soviet-bloc

Card 2/3

Heat and moisture-resistant ...

publication.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F.E.Dzerzhinskogo i Berdyanskiy zavod „Azovkabel'" Kafedra tekhnologii reziny (Department of Rubber Technology, Dnepropetrovsk Institute of Chemical Technology im. F.E.Dzerzhinskiy and Berdyansk "Azovkabel'" Plant)

SUBMITTED: May 21, 1960

Card 3/3

MELAMED, Ch.L.; BLOKH, G.A. [Blokh, H.A.], doktor khim. nauk

Accelerators for the cold vulcanization of rubber. Khim. prom. [Ukr.] no.1:30-33 Ja-Mr '63 (MIRA 17:7)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut imeni Dzerzhinskogo.

BR

ACCESSION NR: AP4025265 S/0153/63/006/006/1025/1030

AUTHOR: Melamed, Ch. L.; Blokh, G. A.; Mashinson, L. Z.

TITLE: Intensification of vulcanizing processes with the aid of the triple accelerator system Tsimat-DFG-Santocure

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 6, no. 6, 1963, 1025-1030

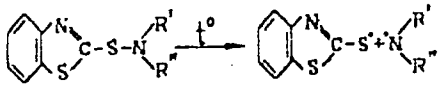
TOPIC TAGS: vulcanization, accelerator, Tsimat, diphenylguanidine, sulfenamide, Santocure, Tsimat diphenylguanidine Santocure system, methyl ziram, rubber, acceleration mechanism, vulcanization mechanism, free radical formation, vulcanization process, tire manufacture

ABSTRACT: Vulcanization kinetics were studied at different temperatures and times using double and triple accelerator systems including Tsimat (zinc dimethyldithiocarbamate) [Abstractor's note: Tsimat is equivalent to domestic product known as methyl ziram.] The effectiveness of the double Tsimat-DFG (diphenylguanidine) system and the triple Tsimat-DFG-Santocure for vulcanizing carbon black filled wear-resistant rubber mixtures was studied. Introduction of the three-component accelerator system reduces the temperature (from 143 to 120 C) and

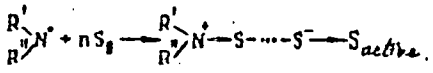
Card 1/5

ACCESSION NR: AP4025265

time (from 50 to 30-40 minutes) requirements for vulcanization. The effectiveness of the components of the system on acceleration of vulcanization is shown in the figure. Lowering the temperature by 10 C doubles the working time of the triple acceleration system. The mechanical properties of the rubbers obtained with the three-component system at the reduced vulcanization temperature of 120 C are equivalent to those of control samples. It is suggested that this low temperature vulcanization be applied to the tire industry as well as to the preparation of other rubber articles. The action of the accelerator system is depicted as follows: decomposition of the sulfenamide (Santocure) to radicals:



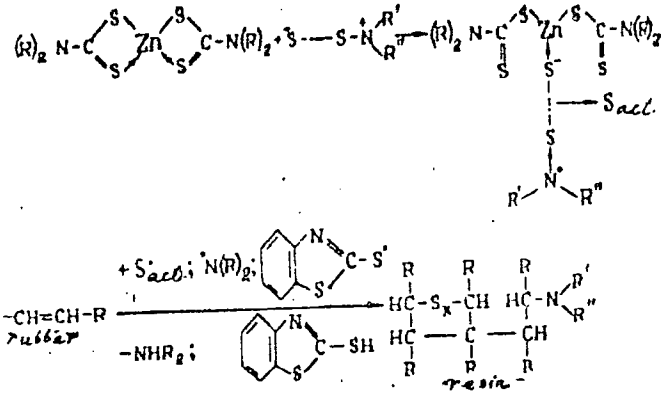
activation of the sulfur by the DFG and the amine radicals formed by the sulfenamide decomposition



Card 2/5

ACCESSION NR: AP4025265

and the formation of the polysulfide complex of Tsimat, which also gives off active sulfur fragments which crosslink the rubber:



Card 3/5

ACCESSION NR: AP4025265

Orig. art. has: 3 equations, 7 tables and 1 figure.

ASSOCIATION: Dnepropetrovskiy khimiko tekhnologicheskiy institut im. F. E. Dzerzhinskogo, Kafedra tekhnologii reziny* (Dnepropetrovsk Chemical Engineering Institute, Department of Resin Technology)

SUBMITTED: 09Nov62 DATE ACQ: 10Apr64 ENCL: 01

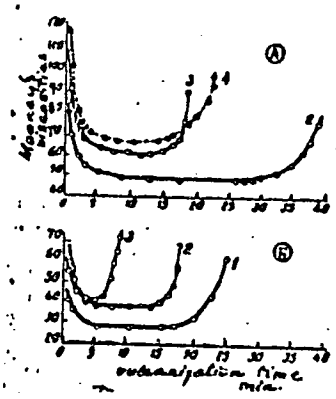
SUB CODE: MT, GC NO REF SOV: 006 OTHER: 000

Card 4/5

ACCESSION NR: AP4025265

ENCLOSURE: 01

Fig. Effect of type of accelerator on tendency of mixture to undergo vulcanization at 110 C (A) and 120 C (B). Accelerators: 1--Santocure - DFG (control); 2--Tsimat - DFG - Santocure; 3--Tsimat - DFG; 4--Tsimat.



Card 5/5

L 15253-65 EPF(c)/EPR/EWP(j)/EWP(k)/EWT(m)/EWP(b)/T/EWP(v)/EWP(t) Pc-4/
Pf-4/Pr-4/Ps-4 RM/WW/JD/HM
ACCESSION NR: AP4045699 S/0138/64/000/009/0022/0024

AUTHOR: Melamed, Ch. L.; Blokh, G. A.; Stryuk, V. I.; Moiseyev, Ye. P.

TITLE: Rubber-metal parts in metallurgical equipment

SOURCE: Kauchuk i rezina, no. 9, 1964, 22-24

TOPIC TAGS: rubber metal part, rubber to metal bonding, bonding strength, natural rubber, nitrile rubber, butadiene styrene rubber, chloroprene rubber, vulcanization accelerator

ABSTRACT: The effect of organic vulcanization accelerators an rubber-to-metal bonding strength has been studied for natural, nitrile (SKN-18), butadrene-styrene (SKS-30), and chloroprene (Nairit B) rubbers. The rubber was bonded to sand-blasted brass-plated steel. The results of the study given in the form of tables show that most natural rubber exhibit satisfactory bonding strength (43.7—54.0 kg/cm^2) with the exception of those made with the ultra-accelerator triethylamine diethyldithiocarbornate, because in this case the vulcanizing sulfur reacts faster with rubber than with brass. The lowest bonding strength

Card 1/2

L 15253-65
ACCESSION NR: AP4045699

3

is exhibited by SKS-30 rubbers. In the case of SKN-18 rubber, rubbers made with thiuram mono- and disulfides have the highest bonding strength (53.5 kg/cm^2). Most accelerators do not affect the bonding strength of chloroprene rubber; sulfur increases the bonding strength of Nairit B to 66.6 kg/cm^2. It is concluded that the rubber-to-metal bonding strength is highly dependent on the type of accelerator used. Experimental rubber-metal shock absorber parts based on natural rubber have been successfully tested at the Krivoy Rag Metallurgical Plant. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Dnepropetrovskiy khimino-tekhnologicheskiy institut (Dnepropetrovsk Institute of Chemical Technology)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT,MM

NO REF SOV: 001 OTHER: 002

Card 2/2

L 54820-65 EWT(m)/EWP(j)/EPF(c) Pc-4/Pr-4 RM

ACCESSION NR: AP5013733 UR/0138/65/000/005/0014/0017

678.763.2+678.762.2-134.535:678.028:678.044

AUTHORS: Blokh, G. A.; Melamed, Ch. L.; Yevchik, V. S.; Baranova, G. A.

TITLE: The effect of OS-2 alkane on polar rubber vulcanization

SOURCE: Kauchuk i rezina, no. 5, 1965, 14-17

TOPIC TAGS: alkane, rubber, rubber mix, rubber property, rubber product, rubber vulcanization, vulcanization, vulcanizate, vulcanized rubber, vulcanizate fatigue/ OS 2 alkane, SKN 26 rubber

ABSTRACT: The effect of the OS-2 alkane on rubber vulcanization was studied in the binary system rubber--OS-2 and also in the standard mixtures of polar chloroprene and butadiene-nitrile. Its effect on vulcanization kinetics was evaluated from the physico-mechanical properties of the vulcanizates and the density of their cross-link structure. At the same temperature (143 ± 2C) the chloroprene was vulcanized from 10 to 90 minutes and the butadiene-nitrile from 10 to 50 minutes. The vulcanization time for chloroprene was shorter by 30%. The optimal OS-2 quantities were 0.25-0.5 parts by weight. No further improvement in the rubber properties was observed with the OS-2 increase to 5 parts by weight, and a negative effect was

Card 1/5

L 54820-65

ACCESSION NR: AP5013733

noted with the further increase. The formation of the cross-link structure in chloroprene mixtures was intensified under the alkane action. No such structure was formed during the vulcanization of the mixture OS-2 and SKN-26 rubber (butadiene-nitrile). Better results were obtained with the standard rubber mixtures on the SKN-26 base. They are shown graphically in Figures 1 and 2 on the Enclosure for different carbon black fillers. The presence of OS-2 in the mixtures containing gas carbon black halved the vulcanization time and decreased the temperature by 10C. In the lampblack mixtures the temperature was lowered by 40C, the time remaining unchanged. At 100C the formation of cross structure was more intensive in the mixtures containing lampblack; the effect of the OS-2 on this process is shown in Fig. 3 on the Enclosure. Orig. art. has: 4 tables and 3 figures.

ASSOCIATION: Dnepropetrovskiy khimko-tekhnologicheskiy institut (Dnepropetrovsk Chemico-Technological Institute)

SUBMITTED: 00 ENCL: 03 SUB CODE: MT, OC

NO REF SOV: 004 OTHER: 000

Card 2/5

L 54820-65

ACCESSION NR: AP5013733

ENCLOSURE: 01

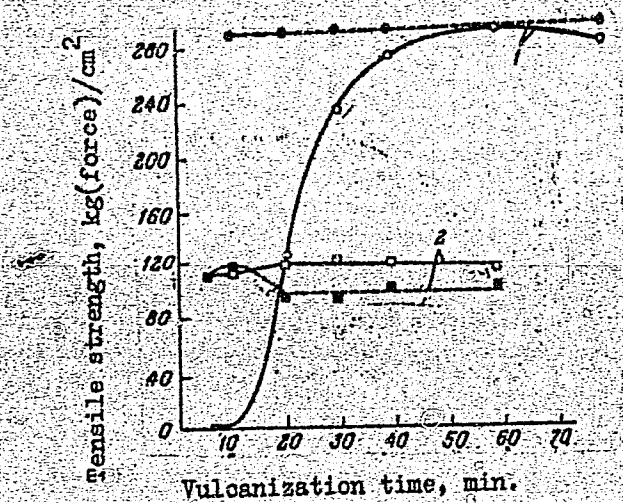


Fig. 1. OS-2 action in SKN-26 mixtures containing different types of carbon black (vulcanization temperature: 143C): _____ 6 without alkane; ------ with 1.5 part by weight of alkane. 1 - gas carbon black; 2 - lampblack

Card 3/5

L 54820-65

ACCESSION NR: AP5013733

ENCLOSURE: 02

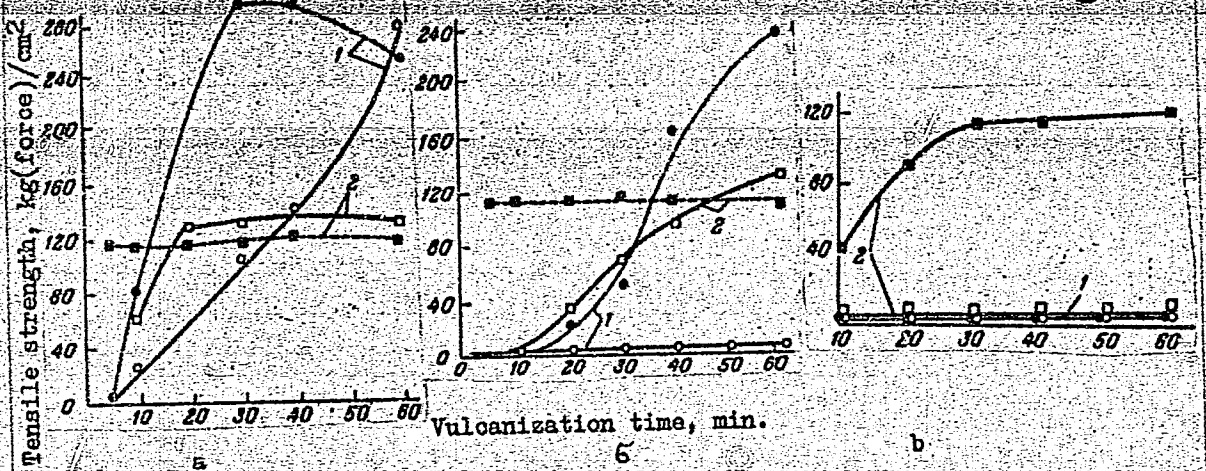


Fig. 2. OS-2 alkane action in SKN-26 mixtures containing different types of carbon black: vulcanization temperature: a - 131C; б - 120C; b - 100C; ——— б without alkane; - - - - - - - with 1.5 parts by weight of alkane. 1 - gas carbon black; 2 - lampblack

Card 4/5

L 54820-65

ACCESSION NR: AP5013733

ENCLOSURE: 03

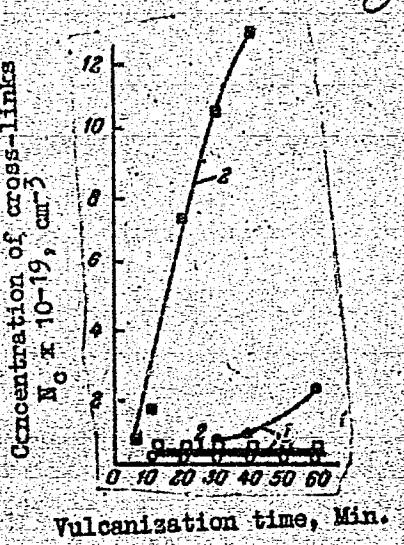


Fig. 3. The effect of OS-2 alkane on the cross-link formation in SKN-26 vulcanizates in the presence of different carbon black types (vulcanization temperature 100C): _____ 6 mixtures without alkane; ------ mixtures containing 1.3 parts by weight of alkane. 1 - gas carbon black; 2 - lampblack

Card 5/5

FINKEVICH, I.M.; MELAMED, D.A.

Use of sulfacyl in the treatment of minor wounds. Zdrav.Belor. 3 no.10:60 O '57. (MIRA 13:6)

1. Vitebskiy oblastnoy kozhno-venerologicheskiy dispanser (glavnyy vrach I.M. Finkevich) i zdravpunkt kozhzavoda g. Vitebska (zaveduyushchiy D.A. Melamed).
(SKIN--WOUNDS AND INJURIES) (ACETAMIDE)

GALEYEV, Akhmet Umerovich [deceased]; PERSHITS, Yuliy Isaakovich; MELAMED, D.A., inzh., retsenzent; LEBEDEV, A.V., inzh., retsenzent; SOBAKIN, V.V., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Fundamentals of mechanics for locomotive crews] Osnovy mekhaniki dlia lokomotivnykh brigad. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1961. 167 p. (MIRA 14:11)
(Mechanics) (Railroads)

MELAMED, E.A.; KUZ'MINA, V.G.

Fractional method of determining pyrophosphates in a cyanide-free electrolyte for brass plating. Kauch.i rez. 21 no.4:49 Ap '62. (MIRA 15:4)

1. Kiyevskiy zavod "Krasnyy rezinshchik".
(Pyrophosphates) (Brass)

GORDON, B.Ye.; MELAMED, E.A.; BELOVA, N.A.

Determining the captax content of rubber by means of amperometric titration with two indicator electrodes. Kauch.i rez. 21 no.8: 53-55 Ag '62. (MIRA 16:5)

1. Kiyevskiy zaovd "Krasnyy rezinshchik" i Nauchno-issledovatel'skiy institut sudebnoy ekspertizy.
(Rubber--Analysis)

16(1)

AUTHOR: Melamed, E.Ya. (Odessa)

SOV/41-10-4-5/1[illegible]

TITLE: Marks for the Boundedness of the Solutions of Some Boundary Value Problems for Partial Differential Equations in the Banach Space (Priznaki ogranichennosti resheniy nekotorykh differentsial'nykh krayevykh zadach s chastnymi proizvodnymi v banakhovom prostranstve)

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1958, Vol 10, Nr 4, pp 394-404 (USSR)

ABSTRACT: The author considers the boundary value problem

$$\frac{\partial U}{\partial t} = A\frac{\partial U}{\partial x} + f(x,t) \qquad (1)$$
$$U(x,0) = \varphi(x),$$

where $U(x,t)$ is a vector with values in the Banach space $\mathfrak{E}$, x is a complex variable in the upper halfplane, $0 \leq t \leq T$, A is a linear bounded operator in $\mathfrak{E}$. Let the function $f(x,t)$ be holomorphic in x for $\mathrm{Im}\, x \geq \alpha$ and continuous in t on $[0,T]$; let $\varphi(x)$ be holomorphic for $\mathrm{Im}\, x \geq \alpha$. Then the solution $U(x,t)$ can be represented as a curve integral, where the integrand depends on A and on the solution of a problem (1') arising out of (1)

Card 1/2

by replacing A by a simple scalar multiplication with a parameter λ. The investigation of these integral representation leads the author to the conditions which have to be satisfied by the spectrum of A in order that the solution of (1) is bounded for all f and φ. These conditions are: the spectrum of A has to lie in the open upper halfspace. Some further similar results are given without a proof.
There are 5 references, 3 of which are Soviet, 1 English, and 1 Polish.

SUBMITTED: January 22, 1957

Card 2/2

POPOV, N.A., doktor tekhn.nauk; KARPIKOVA, L.T., inzh.; MELAMED, B.Ya., inzh.

Shipbuilding keramzit concrete with additives increasing its longevity. Sudostroenie 31 no.4:34-37 Ap '65. (MIRA 18:8)

ACC NR: AM6026325 Monograph UR/

Bonduryanskiy, Zeylik Pertsovich; D'yachkov, Mikhail Andretevich; Melamed, Emmanuil YEmel'tanovich (Deceased)

Marine reinforced concrete ships; designing the hull (Morskiye zhelezobetonnyye suda; proyektirovaniye korpusa) Leningrad, Izd-vo "Sudostroyeniye," 1966. 199 p. illus., biblio. 1900 copies printed.

TOPIC TAGS: [redacted], shipbuilding engineering, reinforced concrete

PURPOSE AND COVERAGE: This book is intended for designers, technologists, and skilled workers in reinforced-concrete shipbuilding plants and for students of higher and technical schools. It discusses the physical and mechanical characteristics of marine reinforced concrete, the various hull designs and the types of reinforced concrete used for each, and the types of ships for which reinforced concrete can be used as the building material. There are 51 references, all Soviet.

TABLE OF CONTENTS [abridged]:

Card 1/2 UDC: 629.12.011.25.001.12

ACC NR: AM6026325

Ch. 2. Materials used in reinforced concrete shipbuilding -- 33
Ch. 3. Reinforced concrete ship designing -- 61
Ch. 4. Structure of hull components of reinforced concrete ships -- 133
Supplements (sample problems on the computation of ship dimensions and strength) -- 185
Bibliography -- 199

SUB CODE: 13// SUBM DATE: 01Feb66/ ORIG REF: 051

Card 2/2

SOV/68-[illegible]-7-[illegible]/[illegible]

AUTHORS: Rozhnyatovskiy, I.I., Dubrovskaya, D.P. and Mel'med, E.A.

TITLE: Purification of Effluent Water from Coking Works by a Treatment with Ozone

PERIODICAL: Koks i khimiya, 1959, Nr 7, pp 63 - 66 (USSR)

ABSTRACT: Laboratory experiments on the purification of coke oven effluent water with ozone are described. The apparatus used for the production of ozone was designed by UPhIN. The apparatus consisted of ozonisers made up from four or more parallel elements and filters for the cleaning of air. Each element consisted of a double walled glass tube 750 mm long. The clearance between the walls of about 1 mm was used for passing the air submitted to an intense silent discharge. The internal and external tubes of ozonisers served as electrodes. For the supply of current to the internal wall the tube was filled with a solution of sulphuric acid into which a copper rod was inserted. The rod was joined to the non-earthed pole of a high voltage transformer. The second earthed pole of the transformer was joined to an earthed water bath into which the elements were immersed. The bath served for the cooling of tubes and as a current conductor from the

Card 1/4

Purification of Effluent Water from Coking Works by Treatment with Ozone

external surface of the elements. Compressed air was purified by passing through solid sodium hydroxide, silicagel and a paper filter. Ozonised air (1 - 2% ozone) was contacted with water by two methods: in a filled column (Figure 1) and by multi-stage bubbling (Figure 2). Spent ammonia liquor was used for the experiments. For the maintenance of the required pH of the medium, lime, magnesium oxide, sodium hydroxide and soda were tested. The experimental results are given in Tables 1 - 3. It was found that a deep purification of spent liquor is possible, oxygen consumption of the water can be reduced from 1600 - 830 to 165 - 89. The deficiencies of contacting in a filled column were as follows: blocking of the column by precipitated $CaCO_3$ and $CaSO_4$

Purification of Effluent Water from Coking Works by a Treatment with Ozone

and 12 - 15% ozone losses. By contacting in a 4-stage bubbling apparatus the utilisation of ozone was higher (ozone losses about 5%) which permitted an increase of throughput by 50 - 60% (in comparison with the filled column apparatus) which reduced blocking of the apparatus by precipitates. The use of calcium and magnesium hydroxide for maintaining pH gave similar results, the use of soda gave poor purification results, and with sodium hydroxide good purification results were obtained but a large amount of hydrates which block the apparatus make it inapplicable. The influence of concentration of active calcium oxide on the degree of purification (Table 3) was tested on the bubbling apparatus. It was found that the best results are obtained at concentration from 166 to 476 mg/litres. The best purification conditions: pH = 12, temperature 50 - 55°C and a uniform supply of ozonised air. The use of ozonised oxygen instead of air was also tried (Table 4). The throughput of the apparatus when operating with ozonised oxygen was doubled at the same ozone consumption. The dependence of the residual oxidisability of

Card 3/4

Purification of Effluent Water from Coking Works by a Treatment with Ozone

water on the amount of ozone used is shown in Figure 3. It was found that the residual oxidisability of water decreased nearly proportionally with the increase of ozone consumption (Figure 3) irrespective of the source of ozone (ozonised air or ozonised oxygen). The work is being continued and the research is directed towards preliminary removal of thiosulphates before the effluent is treated with ozone. There are 3 figures and 4 tables.

ASSOCIATION: Makeyevskiy koksokhimicheskiy zavod (Makeyevskiy Coking Works)

Card 4/4

MELAMED, G.I.; KOGAN, S.M., redaktor; RAKHMATULLIN, F., tekhnicheskiy redaktor

[Rapid technological preparation of machine shops for production] Skorostnaia tekhnologicheskaia podgotovka proizvodstva mekhanoobratyvaiushchikh tsekhov. Tashkent, Gos. izd-vo Uzbekskoi SSR, 1955. 82 p. (MLRA 9:10)

(Machine-shop practice)

MELAMED, G.I., inzh.

Methods for rapid determination of optimum reliable variant for the arrangement of an automatic line. Mash. Bel. no.2:69-77 '60. (MIRA 16:7)

(Machine tools) (Automation)

25(2)
28(1)

S/118/60/000/04/001/023
D001/D006

AUTHOR: Melamed, G.I., Engineer

TITLE: The Arrangement of Continuously Operating Flexible Bufferless Automatic Lines

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1960, Nr 4, pp 1-6 (USSR)

ABSTRACT: Dealing with specific arrangements of given machine tools, the author discusses 3 types of continuously operating flexible bufferless automatic lines designed by SKB-8. Their operational characteristics are discussed in detail. Minskiy zavod avtomaticheskikh liniy (Minsk Automatic Line Plant) built the LM-19 line (Figs 1 & 2) for drilling the 3 center apertures in pistons at Zavolzhskiy motorostroitel'nyy zavod (Zavolzh'ye Motor Plant). This line comprises 4 special AM70 automatic machine tools characterized by a drum type manipulator directly in the machine-tool arrangement. In the LM-19 indivi-

Card 1/4

The Arrangement of Continuously Operating Flexible Bufferless Automatic Lines

dual machine tools operate independently and there is no reciprocity in the flow of parts. The belt conveyor and admission chutes also act as bunker for unfinished parts. At a load factor of 0.75 the LM-19 can handle over 5.5 million pistons a year and, against the highly efficient machine tools at GAZ, cuts manufacturing costs and offers an annual economy of some 100,000 rubles. It occupies a 7.7x4.2m area, has a 15.4 kw electric motor and is tended by 1 operator and 1 adjuster. The LM-22 and LM-27 automatic lines (Fig 3) are used at Kungurskiy mashinostroitel'nyy zavod (Kungur Machine Building Factory) for the respective tasks of tooling the stators and rotors of turbodrills in the turning and grinding. The LM-22 comprises 4 and the LM-27 3 semi-automatic 1P734 lathes, the whole assembly being in 6 parallel

The Arrangement of Continuously Operating Flexible Bufferless Automatic Lines

units. End-face grinding is performed on 2 units, each consisting of 2 bilateral VSh-181 end-face grinders. Transport communication between lathes is rigid and all the machine tools stop if one fails. Each line can handle 300 parts an hour at a load factor of 0.83. It is assumed that, since the automatic line of 3 1P734 lathes which turn gears at the Zavod "Krasnyy proletariy" ("Krasnyy proletariy" Plant) are idle for only 60-70 minutes per shift, the LM-22 and LM-27 will be stood down for 70 minutes during the same period. The lines have electric motors with a capacity amounting to 1,100 kw, are tended by 14 adjusters, 1 dispatcher, 2 distributors, 4 assistants and 2 electricians and occupy an area of 15.3x18.2 m. They perform the work of

S/118/60/000/04/001/023
D001/D006

The Arrangement of Continuously Operating Flexible Bufferless Automatic Lines

148 conventional machines operated by 180 workers.
There are 1 photograph and 3 schematic diagrams.

Card 4/4

MELAMED, G.I., inzh.

Productivity of machine-tool units. Vest.mashinostr. 43 no.5:43-48 My '63. (MIRA 16:5)
(Machine tools)

MELAMED, G.I., inzh.

Prediction of precision potentialities of machine-tool units.
Vest. mashinostr. 43 no.7:42-47 Jl '63. (MIRA 16:8)

(Machine tools)

L 47727-65 EWT(d)/EWT(m)/EWP(c)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)
Pr-4 JD
ACCESSION NR AM1049801 BOOK EXPLOITATION

33
30
8+1

Melamed, G. I.; TSvetkov, V. D.; Ayzman, D. S.

Unit-head machine tools (Agregatnyye stanki), Moscow, Izd-vo "Mashinostroyeniye", 1964, 422 p. illus., biblio. Errata slip inserted. 8,000 copies printed

TOPIC TAGS: machine tool, mechanical engineering, automation

PURPOSE AND COVERAGE: This book covers the basic problems of designing unit-head machine tools for boring, drilling, thread cutting and milling. It describes current designs of power heads, power and rotating-separation tables, spindle heads, attachments, cutting tool, housings, and a number of other components used in the USSR and abroad for unit-head machine tools. The book examines the principles of head assembly and analyzes the productivity and method for calculating the reliability of unit-head tools and their economic effectiveness. Problems of the classification of unit-head tools and their typical components are included. The book is intended for engineers and technicians of the machine tool, mechanical engineering, and instrument building plants and design organizations concerned with the design, fabrication, and use of unit-head machine tools.

Card 1/3

L 47727-65

ACCESSION NR AM4049801

3

TABLE OF CONTENTS [abridged]:

Card 2/3

L 47727-65

ACCESSION NR AM4049801

SUBMITTED: 26Mar64 SUB CODE: MM, IE

NO REF SOV: 023 OTHER: 000

Card 3/3

MELAMED, I.; SHTAMM, V., inzh.

Page of the watchmaker. Mest.prom.i khud.promys. 1 no.2/3:[illegible] M-D '60. (MIRA 14:4)

1. Zaveduyushchiy tsentralizirovannoy chasovoy masterskoy, Saratov (for Melamed).
(Clockmaking and watchmaking--Machinery)

MELAMED, I.L. (Bolgariya)

New variant of Kurlov's formula. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.6:551-553 N-D '61. (MIRA 15:1)

1. Iz Instituta kurortologii i fizioterapii, Ovcha Kupel' Sofiya (dir. - dotsent K. Kirchev).
(MINERAL WATERS--ANALYSIS)

L 62690-65

ACCESSION NR: AP5019082 UR/0286/65/000/012/0105/0105

AUTHORS: Bass, V. V.; Melamed, I. S.; Pogibko, M. G.

TITLE: Thermoanemometer. Class 42, No. 172141

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 105

TOPIC TAGS: anemometer, thermistor, turbulence effect, turbulent flow, turbulent motion

ABSTRACT: This Author Certificate presents a thermoanemometer containing a protective casing and a sensitive element in the form of a thermistor connected into the measuring bridge circuit. To make the thermoanemometer usable for taking long-time measurements in dust-bearing currents, the sensitive element is placed in a turbulent current produced by the protective casing made in a shape of, for instance, a glass mounted in the investigated current, with its open side parallel to the direction of this current.

ASSOCIATION: Donetskiy filial gosudarstvennogo proyektivno-konstruktorskogo instituta "Giprougleavtomatizatsiya" (Donets Branch of the State Design and Construction Institute "Giprougleavtomatizatsiya")

SUBMITTED: 01Jun64 ENCL: 00 SUB CODE: ME,ES

NO REF SOV: 000 OTHER: 000

Card 1/1

MELAMED, I.Ye.

Unsolved problems in the design of traction substations. Elek.i tepl.tiaga 3 no.10:21 O '59. (MIRA 13:2)

1. Nachal'nik elektrotekhnicheskoy laboratorii sluzhby elektrifikatsii i energeticheskogo khozyaystva Moskovskoy dorogi, g.Serpukhov.
(Electric railroads--Substations)

MELN ED, I. Z.

"Effect of the Extent and Temperature of Plastic Deformation on the Thermal Force of Metals of the Copper Subgroup." Cand Phys-Math Sci, Tomsk State U Kuybyshev, 1954. (RZhFiz, Feb 55)

SO: Sum. No 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

MELAMED, I.Z.

USSR/Electricity - Conductors G-4

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12258

Author : Kunin, N.F., Melamed, I.Z.

Inst : Chelyabinsk Institute of Mechanization and Electrification of Agriculture, Chelyabinsk, USSR.

Title : Measurement of Thermal emf of Metals of the Cooper Subgroup Under the Influence of Plastic Deformation at Various Temperatures.

Orig Pub : Fiz. metallov i metallovedeniye, 1956, 2, No 3, 423-427

Abstract : It is shown that within the experimental accuracy, up to deformations on the order of 40 -- 50% for copper, silver, and gold, at each temperature of experiment, the induced thermal emf (C) is proportional to the magnitude of the relative deformation ε . Other conditions being equal, the values of C diminishes with increasing temperature.

Card 1/3

USSR/Electricity - Conductors G-4

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 12258

The dependence of the specific induced thermal emf on and on the temperature at which it is produced, satisfies the equation $C = B\mathcal{E} \exp(-\varkappa T)$, where B and $\varkappa$ are constants of the substance (a table of their vaues is given for copper, silver, and gold). It is shown that the induced thermal emfs obey the additivity law with respect to $\mathcal{E}$ provided the temperature T is constant. The induced thermal emfs satisfy also the rule of additivity in that case, when the second stage of the deformation takes place at a lower temperature than the first stage. Otherwise, the value of the total C turns out to be always smaller than the value expected from additivity considerations. The result is easy to explain, when one takes into account the action of relaxation during the process of deformation. An investigation was made of the temperature course of C in specimens of copper in the temperature range from 0 to 300°. One can assume that within the above interval,

Card 2/3

SOV/137-58-7-15924

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 284 (USSR)

AUTHOR: Melamed, I. Z.

TITLE: Effect of the Temperature of Plastic Deformation of Copper on its Mechanical and Thermoelectric Properties (Vliyaniye temperatury plasticheskoy deformatsii medi na yeye mekhanicheskiye i termoelektricheskiye svoystva)

PERIODICAL: Sb. nauchn. tr. Kuybyshevsk. industr. in-ta, 1957, Nr 7 [a], pp 137-142

ABSTRACT: The effect of the temperature of deformation on the mechanical and thermoelectrical properties of Cu was investigated. Specimens of 0.9-mm diameter and 200-mm length, prepared from M-1 type wire, were annealed at 400°C for 24 hours in a vacuum and were then subjected to plastic torsion at a constant speed of eight revolutions per minute at different temperatures ranging from room temperature to 364°. With the increase in the deformation temperature the e. m. f. arising in a homogeneous metallic chain one part of which is plastically deformed and the other is soft decreases more rapidly than the specific work of deformation. The magnitude of the induced e. m. f. is

Card 1/2

Effect of the Temperature of Plastic Deformation (cont.)

determined by the portion of the work which is expended on the plastic deformation and transformed into latent energy. The greater part of the work is transformed in the process of the deformation of the metal into heat and simulates the intensification of the processes of recovery and recrystallization during the deformation. The origination of e.m.f. in a homogeneous chain as a result of the deformation of a part of the chain indicates the presence of distortions in the crystalline lattice of the metal on which a part of the work of deformation is expended. Therefore, the latent energy is the potential energy of the distortion. The phenomenon of the induction of e.m.f. during plastic deformation of the metal is in linear relation to the absorption of energy and can serve as the method for the study of the latter, taking into account the effect of the temperature. The conclusions obtained are valid for other metals and for the various types of deformation.

E. K.

1. Copper--Deformation 2. Copper--Temperature factors

TRUSEVICH, B.I., akademik; MELAMED, Kh.I., kand.med.nauk

Influence of the nervous system on the sugar curve. Zdrav.Belor. 3 no.10:8-12 O '57. (MIRA 13:6)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta. 2. Akademiya nauk BSSR (for Trusevich).
(SUGAR IN THE BODY) (NERVOUS SYSTEM)

USSR / Human and Animal Physiology. Excretion. T-6

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3491

Author : Molamed, Kh. I.
Inst : Not given
Title : Clinical Significance of the Phenolsulfonphthalein Test (Phenol Red) for Kidney Function Determination

Orig Pub : Zdravookhr. Belorussii, 1957, No 8, 29-33

Abstract : No abstract given

Card 1/1

MELAMED, Kh. I.

MELAMED, Kh. I., kand. med. nauk; DOVGYALLO, O.G., aspirant

Clinical course of influenza in the 1957 epidemic. Zdrav. Belor. 5 no.2:7-9 F '59. (MIRA 12:7)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta (zaveduyushchiy kafedroy - akademik AN BSSR B. I. Trusevich).
(MINSK--INFLUENZA)

HELAMED, Kh.I., kand.med.nauk; KHODINSKIY, N.A., klinicheskiy ordinator

Intravital diagnosis of pheochromocytoma. Zdrav.Belor. 5 no.7:23 Jl '59. (MIRA 12:9)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta (zav.kafedroy - prof.B.I.Trusevich).
(ADRENAL GLANDS--TUMORS)

MELAMED, Kh.I., kand.med.nauk; MASENKOVA, O.G., kand.med.nauk

Clinical course of myocardial infarct. Zdrav.Belor. 5 no.8: 10-11 Ag '59. (MIRA 12:10)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta (zaveduyushchiy kafedroy - akademik AN BSSR B.I.Trusevich).

(HEART--INFARCTION)

MELAMED, Kh.I., kand.meditsinskikh nauk

Blood protein fractions in hypertension. Zdrav. Belor. 6 no.8:11-14 Ag '60. (MIRA 13:9)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta (zaveduyushchiy kafedroy - akad. AN BSSR B.I. Trusevich).
(BLOOD PROTEINS) (HYPERTENSION)

MELAMED, Kh.I. , kand.med. nauk; DOVGYALLO, O.G., assistent

Listeriosis. Zdrav. Bel. 7 no. 2:35-37 F '61. (MIRA 14:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta (zaveduyushchiy kafedroy - zasluzhennyy deyatel' nauki, akademik AN BSSR B.I. Trusevich).
(LISTERIOSIS)

MELAMED, Kh.I.; GABRILOVICH, I.M.

Importance of antistreptokinase in rheumatism. Zdrav.Bel. 8 no.12:19-22 D '62. (MIRA 16:1)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta (zav. kafedroy - akademik AN BSSR B.I.Trusevich [deceased]) i 4-y klinicheskoy bol'nitsy g. Minska (glavnyy vrach Ye.M.Sel'dimirova).
(RHEUMATIC FEVER) (ANTISTREPTOKINASE)

BADIN, K.; MELAMED, L.

Machine for interpreting drawings. IUn. tekh. 4 no.9:48 S '59. (MIRA 12:12)
(Electronic control)

MELAMED, Lipa Grigor'yevich; MYAGKOV, V.A., redaktor; AGRANOVSKAYA, N.D., redaktor izdatel'stva; SHITS, V.P., tekhnicheskiy redaktor

[Organization of continuous lumbering operations in the Carpathians] Organizatsiia tsiklichnoi raboty na lesozagotovkakh v gornykh usloviiakh Karpat. Moskva, Goslesbumizdat, 1956. 47 p. (MLRA 9:12)
(Carpathian Mountains--Lumbering)

MELAMED, L.G.

New design of sections for frame furniture. Der.prom. 8 no.2:7-8 F '59. (MIRA 12:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny.
(Furniture)

MELAMED, L.G.

Lightweight plywood boards for furniture. Der. prom. 8 no.7:14-15 Jl '59. (MIRA 12:9)
(Plywood)

MELAMED, Lipa Grigor'yevich; SHVEDOV, V.N., red.; PLESHANOVA, M.I., red. izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Technology of the manufacture of the basic assemblies of frame furniture] Tekhnologiia izgotovleniia osnovnykh uzlov korpusnoi mebeli. Moskva, Goslesbumizdat, 1961. 41 p. (MIRA 15:1)
(Furniture)

MELAMED, L.G.

Mechanization of hoisting and conveying operations in furniture factories. Der.prom. 10 no.11:13-14 N '61. (MIRA 14:10)

1. Ukrigipromebel'.
(Furniture industry--Equipment and supplies)

MELAMED, L.G.; KARAGODINA, L.V.

Determining the coefficient of strength utilization of fibers in twisted articles. Tekst. prom. 25 no.10:93-94 O '65.
(MIRA 18:10)

1. Sotrudniki laboratorii kruchenykh izdeliy TSentral'nogo nauchno-issledovatel'skogo instituta promyshlennosti lubyanykh volokon, Moskva.

MELAMED, L. R.

"Certain New Methods for Controlling the Anode Current of Thyratrons." Sub 29 Apr 47, Inst of Automatics and Telemechanics, Acad Sci USSR

Dissertations presented for degrees in science and engineering in Moscow in 1947.

SO: Sum.No. 457, 18 Apr 55

MELAMED, M.

Melamed, M. "Economy of gasoline by switching off cylinders," Avtomobil, 1949, No. 3, p. 11-13

SO: U-4934, 29 October 1953, (Letopis 'Zhurnal 'nykh Statey, No. 1, 1949).

MELAMED, M.

Eksploatatsiia gazogeneratornykh avtomobilei v zimnikh usloviiakh. /Exploitation of gas generating automobiles under winter conditions/. (Avtomobil', 1950, no. 3, p. 1.-13, diagrs.).

DLC: TL4.A87

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

MELAMED, M., inzh.; OSTAPCHUK, N., inzh.

Operation of ZSM-10 sieve-air separators and their shortcomings.
Muk.-elev. prom. 26 no. 12:17-18 D '60. (MIRA 13:12)

1. Tashkentskiy mel'nichnyy kombinat No.2.
(Separators (Machines))

MELAMED, M.; GERSHENZON, O.

Maximum utilization of grain waste for the production of mixed feeds. Muk.-elev. prom. 28 no.1:22-23 Ja '62.
(MIRA 16:7)

1. Glavnyy inzh. Tashkentskogo mel'nichnogo kombinata No.2 (for Melamed). 2. Nachal'nik otdela tekhnokhimicheskogo kontrolya Tashkentskogo mel'nichnogo kombinata No.2 (for Gershenzon).
(Feeds) (Grain--Milling)

KLEBANOV, M.A., prof. (Kiyev); Prinimali uchastiye: BEREZITSKIY, A.V. (Kiyev); PEKAR', P.P.; SAVENKOV, D.I.; TARANENKO, M.I.; MELAMED, M.A.; BORSHCHEVSKIY, M.L. (Odessa); VIL'NYANSKIY, L.I. (Khar'kov); SOKOLOVA, Yu.I. (Khar'kov); ABERMAN, A.A.; KULAKOVA, S.A. (Simoferopol'); FUKS, R.A. (Dnepropetrovsk); BEZNOSOVA, Zh.A. (Vinnitsa); KUKLINA, N.P. (Zhitomir); SIDORENKO, G.P. (Chernovitsy); D'YACHENKO, N.S. (Stanislav).

Reduction in the periods of therapeutic pneumothorax following its use in combination with antibacterial therapy. Vrach. delo no.12: 36-40 D '60. (MIRA 14:1)

1. Ukrainskiy institut tuberkuleza imeni F.G.Yanovskogo (for Klebanov).
2. Dispanser Yugo-Zapadnykh zheleznykh dorog (for Aberman).
(PNEUMOTHORAX) (TUBERCULOSIS)